# Development Control Committee A – 11 August 2021

ITEM NO. 2

WARD: Avonmouth & Lawrence Weston

SITE ADDRESS: Green Court Access 18 Bristol

**APPLICATION NO:** 20/03659/F Full Planning

**DETERMINATION** 13 August 2021

**DEADLINE:** 

Proposed alteration to the Low Carbon Energy Facility granted under 12/01532/F, to increase the tonnage throughput to 156,343 tonnes of refuse derived fuel per annum, the originally permitted feedstock, as well as the introduction of a catchment of 50 miles from which the RDF would be derived.

**RECOMMENDATION:** Grant subject to Condition(s)

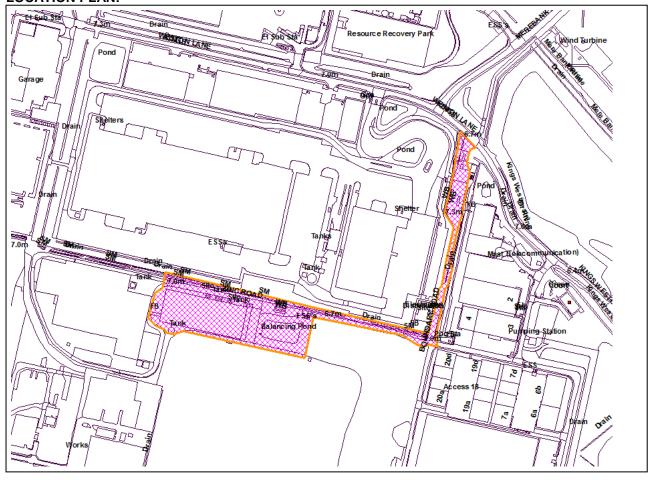
AGENT: GP Planning Ltd APPLICANT: Zeus Renewables

ICon Innovation Centre82 King StreetEastern WayManchesterDaventryM2 4WQ

NN11 0QB

The following plan is for illustrative purposes only, and cannot be guaranteed to be up to date.

## **LOCATION PLAN:**



02/08/21 12:32 Committee report

## **SUMMARY**

This application relates to the Low Carbon Energy facility off Zinc Road at Access 18, whose main function is to generate energy from waste materials through the process of gasification (combustion at high temperatures). The facility is in place, having secured planning permission in 2010, but has not operated since 2016.

The applicant (Zeus) has acquired the site and wishes to make alterations to how the facility can operate.

Planning permission was originally granted in 2010 for an 'Energy from Waste' facility to process waste from the neighbouring Mechanical Biological Treatment plant. Whilst the application looked at fuel types, throughput and transport movements, no planning conditions relating to these characteristics were imposed on the 2010 consent.

Various planning applications seeking amendments have been dealt with in more recent years, and these affected the fuel type, throughput and transport movements when compared to the 2010 scheme. These changes have been approved following the adjacent MBT facility ceasing operations but have not been implemented.

More recent applications have not included conditions, rather, advice notes to alert the applicant to the fact that any changes in transport movements or fuel characteristics would need planning permission. The applicant is therefore applying for planning permission for these amendments.

Objections to the scheme have raised the issue of flies and the unneighbourly operation of the previous owners (New Earth Solutions).

Councillor Alexander has referred the application to committee. The reason given on the referral form is:

"The proposed increase in tonnage to be processed would not be acceptable at a time when we have an existing insect problem in the area which is now being scientifically investigated."

The planning regime may only control certain characteristics, whereas others are controlled by Environment Agency permits. Officers are in support of the application in view of the fact that the planning impacts are considered to be acceptable.

## SITE DESCRIPTION

The application relates to the Low Carbon Energy Facility ("the Facility") which is an existing waste processing plant within Avonmouth industrial area. The Facility contains plant which essentially takes the fuel (waste material, or 'feedstock'), exposes it to high temperatures to ignite, heat and dry it to starve it of air. This process creates energy - a process called gasification - and is used to power two steam turbine generators.

The Facility was originally granted planning permission in 2010 (see history section below). It was originally intended to use refuse derived fuel (RDF) from the adjacent Mechanical Biological Treatment (MBT) as both plants were operated by the same company - New Earth Solutions. However, New Earth ceased operations in 2016 and since then the Facility has not been operational.

The new owners of the site, Zeus - the applicant for this application, have made various amendment applications since acquiring the site in 2017 which are listed below. Waste wood is now the approved fuel type, and the Facility has a 50-mile catchment area from within which wood waste can be sourced. It is possible to treat up to 120,000 dry tonnes of waste per year, and generate up to 14MW of low carbon and renewable energy - enough to power 28,000 homes.

The site forms part of the Principle Industrial and Warehousing Area (PIWA), Flood Zone 3, COMAH zone and sustainable drainage zone.

#### RELEVANT HISTORY

## 10/02837/F

Development of a Low Carbon Energy Facility in connection with the adjoining Mechanical Biological Treatment Facility.

Granted: 18 October 2010

The reason for approving this application was as follows;

The development of a Low Carbon Energy facility would complement the under construction Mechanical Biological Treatment building, and the proposal would promote more environmentally friendly ways of dealing with waste, and diverting from landfill. It is considered that the scheme would support the aims of current Government Planning Guidance on waste and renewable energy generation, and therefore approval is recommended.

#### 12/01532/F

Development of a Low Carbon Energy Facility (which was a variation of 10/02837/F) Granted: 28 June 2012

This application varied the above consent as follows:

- increased capacity (to receive 120,000 tonnes of feedstock from the neighbouring MBT (approved scheme accommodated 100,000 tonnes)
- Increased energy output from 7MWe to 13MWe
- New external air cooled condenser
- Increase height of stack from 28m to 30m
- New location of car parking and storage

#### 12/03648/COND

Approval of details reserved by condition No. 10 (Remediation works) for planning permission 12/01532/F - Development of a Low Carbon Energy Facility

Condition discharged: 29 October 2012

## 12/04264/COND

Application to approve details in relation to condition no. 6 (Heat export feasibility review) of permission number 12/01532/F for development of a low carbon energy facility.

Condition discharged: 19 November 2012

## 12/04276/COND

Application for approve details in relation to condition no. 10 (Heat export feasibility review) of permission number 10/02837/F for the development of a Low Carbon Energy Facility in connection with the adjoining Mechanical Biological Treatment Facility (currently under construction. Condition discharged: 19 November 2012

## 13/02960/COND

Application to approve details in relation to condition no.15 (full travel plan) attached to planning permission 12/01532/F for the development of a Low Carbon Energy Facility (Major Application). Condition discharged: 26 November 2013

#### 14/00977/F

Erection of a workshop/storage building to service the low carbon energy facility, and ancillary car park.

Granted: 20 June 2014

#### 14/03287/COND

Approval of details reserved by condition no. 2 (Contaminated Land) of planning permission 14/00977/F for erection of a workshop/storage building to service the low carbon energy facility, and ancillary car park.

Condition discharged: 14 August 2014

### 16/05490/NMA

Application for Non-Material Amendment application following consent granted under app. no. 12/01532/F for a Low Carbon Energy Facility (Major Application) - now proposed increase in height roof to create stepped profile.

NMA Refused: 28 November 2016

## 17/01007/X

Variation to condition no.16 (List of approved plans) attached to consent granted under app.no. 12/01532/F- proposed change central section of Process Building and raising height of air cooled condenser unit.

Granted: 29 June 2017

## 17/04633/SCR

Request for a Screening Opinion as to whether an Environmental Impact Assessment is required for feed supply to the site.

Confirmed not EIA development: 18 October 2017

#### 17/05746/F

Proposed alteration to functionality of Low Carbon Energy Facility granted under 12/01532/F, to change the type of feedstock (fuel) processed by the facility, as well as the location it is derived from. Granted: 21 December 2017

### **APPLICATION**

The original application for the Facility was granted on the basis that feedstock would be derived from the MBT facility on the adjacent site, and this was seen as a positive aspect of the scheme due to the minimal transport movements required to support the process. In view of concerns raised in application reference 17/01007/X relating to changes in fuel type, an advice note was attached to the decision which alerted the applicant to the fact that planning permission would be required for changes in type of fuel or transport movements.

The most recent application (17/05746/F) granted permission for waste wood fuel to be sourced from within a 50 mile catchment. In order to protect the commercial interests of the Facility, the current application seeks permission to include (revert to) the ability to use refuse derived fuel (RDF) in addition to waste wood fuel.

The applicant also proposes to increase the amount of material being processed by the plant from 120,000 tonnes (which was approved by 12/01532/F) to 156,343 tonnes per annum.

Whilst there are no changes proposed to the external envelope of the Facility, there would be new plant installed internally. The existing chimney would also be replaced, but to the same height as it is currently (31.3m).

## RESPONSE TO PUBLICITY AND CONSULTATION

Consultation took place in line with the statutory requirements. Letters were sent to nearby neighbours and a site notice and a press advert were posted. The 21 day period for comment expired on 23.12.20.

Two objections were received, and a summary of the comments received is below:

### From one party:

- Since the application 12/01532/F allowed New Earth Energy to process waste recycling on site, the residents of Avonmouth have been plagued by flies. It is believed that New Earth Solutions was a major if not sole contributor to the issue.
- It would appear that the offices for New Earth Solutions are located very close to those of the current applicant Zeus Renewables, perhaps indicating a direct link or re-branding with another name.
- New Earth Solutions have demonstrated an inability to safely process baled refuse due to having lost local authority contracts.
- Whilst Energy from Waste is the current solution of choice, it would appear that contracts to process local waste have already been awarded to a competitor plant Suez. This means it is likely that waste will be transported a considerable distance in heavy lorries on an already crumbling road network.
- Fly monitoring could be confused if another plant became operational flies pose a public health risk particularly in view of the Asda distribution depot and the wine bottling plant nearby. Is there a possibility of restricting the storage of waste to winter months when the flies do not breed?
- This application is being presented during a pandemic when the opportunity for public meeting is not available. The Avonmouth Planning Group which I chair is currently suspended due to the pandemic.

## A second objection:

- There are regularly horrendous odours from waste plants here, RDF from this will only serve to worsen this air pollution
- In the light of the incident 3rd Dec at Wessex Water resulting in the sad news of workers being killed, and the fire at Sims metals, residents are more fearful than ever of serious incidents.

## **OTHER COMMENTS**

## Air Quality has commented as follows:-

The development proposes an increase in tonnage throughput and a change in feedstock. The increase in tonnage throughput will not entail any additional HGV movements and the number of movements will remain within permitted limits, hence air quality impact from HGV movements will be negligible.

A chimney height assessment has been conducted based on the changed feedstock and concludes that the current chimney height is sufficient to disperse pollutants to the same degree as pre development conditions. Hence I have no objections to the development. I am assuming that the Environment Agency has been consulted on this change and that it raises no objections to the scheme.

## Environment Agency (Sustainable Places) has commented as follows:-

The site which is the subject of this proposed development already has an environmental permit issued by Environment Agency for the incineration of waste. The changes proposed in this planning application include an increase in annual quantity of waste to be burnt, and a change to the incineration technology to be used. This will require a variation to the existing environmental permit. Any potential variation of the permit will require a re-assessment of emissions from the plant, including a reassessment of stack height. We do not currently have enough information to know if the proposed development can meet our requirements to prevent, minimise and/or control pollution. Furthermore, the proposed developer is different to the current permit holder. The developer will also need to apply to the Environment Agency to transfer the environmental permit into their name.

Please be aware, where a developer decides not to parallel track their planning and environmental permit applications, we will not offer detailed advice or comments about how permitting issues affects planning.

Pollution Control has commented as follows:-

No objection. Comments are incorporated at Key Issue C - Amenity.

Transport Development Management has commented as follows:-

No objection.

The permitted facility has an accepted tonnage throughput of 120,000 tonnes per annum. The application proposed to increase this to approximately 156,000 tonnes per annum, an increase of approximately 25%.

The site is permitted a total of 29 HGV movements per day. The RDF would be imported in baled form and as a consequence it is much denser in form and can be loaded in much more efficient manner than wood or other loose waste material. The Applicant has stated they are content to work within the existing permitted HGV movements (paragraph 3.1.10 of the Planning statement).

No concerns are therefore raised however a condition should be applied which restricts the HGV movements (in line with the existing).

## **RELEVANT POLICIES**

National Planning Policy Framework – February 2019

Bristol Local Plan comprising Core Strategy (Adopted June 2011), Site Allocations and Development Management Policies (Adopted July 2014) and (as appropriate) the Bristol Central Area Plan (Adopted March 2015) and (as appropriate) the Old Market Quarter Neighbourhood Development Plan 2016 and Lawrence Weston Neighbourhood Development Plan 2017 and the Hengrove and Whitchurch Park Neighbourhood Development Plan 2019.

In determining this application, the Local Planning Authority has had regard to all relevant policies of the Bristol Local Plan and relevant guidance.

### **KEY ISSUES**

## (A) ENVIRONMENTAL IMPACT ASSESSMENT - SCREENING

Officers have considered whether the development requires to be screened as to whether assessment under the EIA Regulations is necessary. The original application and subsequent changes were accompanied by an Environmental Statement (ES), however, the most recent application (referenced above) was confirmed not to constitute EIA development (application reference 17/04633/SCR.)

The Facility falls within Schedule 2 of the EIA Regulations because it uses incineration processes, and the development proposed here (increased tonnage throughput as well as its source from a proposed 50 mile radius) would affect its operations. Therefore it is necessary to screen this proposal.

Schedule 3 of the EIA Regulations sets out the criteria for screening Schedule 2 development - the characteristics of the development; the environmental sensitivity of the location of the development; and the characteristics of the potential impact.

The two types of fuel supply (waste wood and RDF) have been previously assessed for screening under the EIA Regulations and the development gained approval for their use. The proposal here would not result in additional transport movements, as set out below in Key Issue (C), therefore it is not considered that the proposed development would require further Environmental Impact

Assessment to be carried out.

It is therefore considered that Regulation 8 of the EIA (2017) regulations applies - that the LPA can adopt a screening opinion based on the information provided in the application. In view of the above, it is not considered that the development requires an Environmental Statement.

## (B) WOULD THE PROPOSAL INTRODUCE ANY LAND USE ISSUES

The NPPF supports sustainable economic growth, and the Core Strategy policy BCS8 secures the land within Principle Industrial and Warehousing Areas (PIWAs) - protecting it where it makes a valuable contribution to the economy and employment opportunities.

BCS4 sets out the policy approach to Avonmouth, which is identified as a priority area for industrial and warehousing development and renewal. The policy states that development in this area will be supported in principle, including encouragement for proposals for waste management. It also specifically acknowledges the opportunities for energy from waste facilities.

The continued use of the site to process waste to derive energy would not alter the approved land use (which is B2), and the facility would remain an appropriate use for the PIWA.

The comments received during consultation queried why another waste facility is needed in the area. The Facility is already in place and has a lifespan of around 15-20 years remaining. The applicant has responded in a statement to elaborate on this, to say;

"There is still excess waste material that needs to be disposed of, due in part to a reduction in the amount of material being exported, countries no longer wishing to accept imported waste, Brexit uncertainty, and other economic matters.

The severing of the energy recovery facility and the materials recovery facility means that the Facility can operate independently and control its own processes, including the rate of delivery and storage of waste."

There is no reason to object to the proposal based on the number of similar facilities in the area. Furthermore, the plant is already in place so no new land use issues would be introduced as a result of the proposal.

# (C) WOULD THE APPLICATION ADEQUATELY ADDRESS TRANSPORT AND MOVEMENT ISSUES?

BCS10 requires developments to be designed to reduce the negative impacts of vehicles, such as excessive volumes, fumes and noise. DM23 requires proposals to be supported by a Transport Statement where development is likely to have a significant impact.

The application sets out that the facility would require no additional HGV trips than in the previous application - which is 29 HGV trips per day, to deliver the fuel required. The RDF would be transported in baled form, which is denser and can be loaded onto HGVs more efficiently than wood or loose waste material, hence why no additional trips would be required. Analysis of the Boundary Road/Kings Weston Lane and Kings Weston Lane/St Andrews Road junctions using a combination of Picardy and Linsing (modelling programmes) was carried out previously, and it was considered that both junctions would continue to function safely with this number of vehicle trips.

The proposal is therefore acceptable on transport grounds. Officers have considered whether to impose a condition restricting the number of HGV movements. There has been no such condition on previous consents, however with the changes in characteristics proposed, it is pertinent now to consider whether a condition is necessary to make this development acceptable. Such a condition would guard against potentially harmful increases in HGV movements, and the future assessment of

any such increase would be safeguarded by the imposition of this condition. Therefore it is considered necessary in this instance to impose the condition. It would not overly encumber the applicant's operations on site, since the supporting material for the application confirms that no increase in HGV trips would be needed with the alterations proposed in this application.

## (D) WOULD THERE BE ANY AMENITY ISSUES?

The pollution potential of this facility has already been assessed for both fuel types - RDF and waste wood, and the number of transport movements is not proposed to increase.

The NPPF seeks to avoid noise from giving rise to significant adverse impacts on health and quality of life arising from noise from new development, and to mitigate adverse impacts. It also recognises that some businesses will often create some noise, and should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established.

Local Plan Policy supports this, and BCS21 expects development to safeguard the amenity of existing developments and create a high-quality environment for future occupiers.

BCS23 requires development to be sited and designed that avoids adversely impacting environmental amenity or biodiversity of an area in terms of fumes, dust, noise, vibration, smell, light or other forms of air, land, water or land contamination. In doing so, the same policy also requires the impact of existing sources of noise or other pollution to be considered when designing and locating new development.

DM33 Development that has the potential for an unacceptable impact on environmental amenity, biodiversity or water quality by reason of pollution, should include an appropriate scheme of mitigation. The site is not located within the Air Quality Management Area (which relates mainly to the City Centre).

The application has been reviewed by the Council's Pollution Control officer, who has commented on the issue of potential for noise, and the fly issue.

In view of the proposed new plant to be installed within the Facility, a condition is imposed to ensure that noise levels remain below a specified background level.

The comments submitted during consultation have raised the issue of flies plaguing the area and Avonmouth Village. The flies have been causing problems for a number of years and officers in the Council's Pollution Control team have been involved with the investigation of the issue. Officers are sympathetic to this problem, however it is not a matter that can be controlled by the planning regime.

In spite of this, the applicant has submitted assurances that whilst they cannot comment on previous owners, they understand that this is an important matter and its management will be a key consideration during plant operation. They have offered to set up a Community Liaison Group to illustrate their commitment to being a good neighbour.

Information has been provided on how Zeus will store and manage their waste. To prevent fly problems they have set out a range of measures, including ensuring staff are trained in the importance of the issue and how to control it, implementing the most appropriate long term fly prevention methods, and regularly reviewing their effectiveness.

The storage of waste to prevent flies is a matter that would be controlled by the Environmental Permit issued by the Environment Agency, and the applicant is aware that they will need to apply for a permit. As far as the matter is not something that is controlled by the planning regime, the applicant's response to the objection for the purpose of responding to comments on this planning application is welcomed. Officers are satisfied that sufficient comfort has been provided to ensure that the

proposed operations would cause no new amenity problems.

The application has also been reviewed by the Council's Air Quality officer who has stated air quality impact from HGV movements will be negligible.

The application is accompanied by a Chimney Height Calculation, which was carried out in accordance with Her Majesty's Inspectorate of Pollution, Technical Guidance Note (Dispersion) D1 - "Guidelines on Discharge Stack Heights for Polluting Emissions". The assessment has been conducted based on the changed feedstock and concludes that the current chimney height is sufficient to disperse pollutants to the same degree as previous consents. Hence no objections are raised in terms of the scheme's impact on air quality.

In view of the distance of the application site from nearest residential areas (Avonmouth Village being over 1km away), there are not considered to be any other amenity impacts arising from the proposal.

To summarise the amenity section, a condition is recommended to limit the number of HGV movements, and an additional condition to ensure noise levels from the proposed new plant remain within the acceptable range.

# (E) WOULD THE PROPOSED ALTERATIONS MAINTAIN THE FACILTY AS A SUSTAINABLE DEVELOPMENT?

The Facility is already in situ, and still has a lifespan of 15-20 years. The development itself would process waste wood and Refuse Derived Fuel, promoting the production of sustainable energy from waste. This is in accordance with the NPPF which requires LPAs to approve applications (unless material considerations indicate otherwise) where its impacts are acceptable. The West of England Joint Waste Core Strategy as well as Local Plan policies also support sustainable waste handling, and the application has successfully demonstrated that there would be no additional transport movements compared with previous approvals for the Facility. The long-term operation of the business depends on having the flexibility to derive feedstock from sources, but this application also brings back the option of sourcing fuel from the adjacent MBT facility if it becomes available, which was originally intended, and would require very few (if any) vehicle movements. The development would therefore be sustainable in this regard.

## (F) OTHER MATTERS

## i. Increase in Feedstock tonnage

Whilst not a planning matter, the application documents explain that the increase in feedstock tonnage would not introduce any planning issues since the number of vehicle movements would remain as already approved. The application explains that this is due to the efficient baling of compacted waste for transportation. The Air Quality officer has raised no concerns in terms of the combustion of increased amounts of fuel stock, and this is a matter that would be controlled by the EA permit.

## ii. Environment Agency Permit

The Environment Agency (EA) has commented that the proposed change to feedstock would require a change to the permit, but that the applicant has not approached the Agency for advice concurrent to this application. The applicant is aware of this, and has commented that an application is to be lodged with the EA post determination of the planning application. They have explained that an Environmental Permit must include a full detailed plant design which can be prohibitively expensive in the absence of planning certainty.

The planning considerations have been assessed in the preceding paragraphs.

## **EQUALITIES ASSESSMENT**

During the determination of this application due regard has been given to the impact of this scheme in relation to the Equalities Act 2010 in terms of its impact upon key equalities protected characteristics. These characteristics are age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. There is no indication or evidence (including from consultation with relevant groups) that different groups have or would have different needs, experiences, issues and priorities in relation this particular proposed development. Overall, it is considered that this application would not have any significant adverse impact upon different groups or implications for the Equalities Act 2010.

#### CONCLUSION

The reversion to RDF as well as waste wood as sources of feedstock, as well as the increased throughput of tonnage per annum, gives rise to no land use, amenity, transport, air quality, or sustainability concerns, and planning permission is recommended. Conditions to align with previous consents are applied, with additional conditions limiting the number of HGV movements to 29 per day, and one to limit noise levels, as set out in the supporting material.

## COMMUNITY INFRASTRUCTURE LEVY

This development is liable for CIL, however the CIL rate for this type of development, as set out in the CIL Charging Schedule, is £nil and therefore no CIL is payable.

## RECOMMENDED GRANT subject to condition(s)

## Time limit for commencement of development

1. Full Planning Permission

The development hereby permitted shall begin before the expiration of three years from the date of this permission.

Reason: As required by Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

## Pre commencement condition(s)

2. The provision of surface water drainage shall be implemented in accordance with the details set out in the Flood Risk Assessment (approved under 12/01532/F) and Plans, unless any changes are required, which could be submitted to and agreed in writing by the Local Planning Authority.

Reason: To ensure that surface water is satisfactorily controlled.

## Pre occupation condition(s)

3. Completion and Maintenance of Car/Vehicle Parking - Shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the car/vehicle parking area shown on the approved plans has been completed, and thereafter, the area shall be kept free of obstruction and available for the parking of vehicles associated with the development

Reason: To ensure that there are adequate parking facilities to serve the development.

4. Completion and Maintenance of Cycle Provision - Shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the cycle parking provision shown on the approved plans has been completed, and thereafter, be kept free of obstruction and available for the parking of cycles only.

Reason: To ensure the provision and availability of adequate cycle parking.

5. The Heat Export Feasibility Review approved under reference 12/04264/COND shall be adhered to throughout the lifetime of the development unless otherwise agreed in writing by the LPA.

Reason: To ensure that waste heat is available for use to the benefit of the local domestic, commercial and industrial users when the demand arises.

## Post occupation management

6. The Flood Warning and Evacuation Plan (FEP) approved under application 10/02837/F shall be implemented following occupation of the facility.

The FEP shall be reviewed at intervals not exceeding 3 years, and will form part of the Health & Safety at Work Register maintained by the applicant.

Reason: To reduce the impact of flooding on the future occupiers of the proposed development.

7. Restriction of noise from plant and equipment

The rating level of any noise generated by plant & equipment as part of the development shall be at least 5 dB below the background level as determined by BS4142: 2014 Methods for rating and assessing industrial and commercial sound.

Reason: To safeguard the amenity of nearby premises and the area generally.

8. The process of sorting of all waste shall not be conducted outside of the building hereby approved by this application.

Reason: To safeguard the amenity of the area

9. The verification report previously approved under 12/03648/COND demonstrating completion of the works set out in the approved remediation strategy and the effectiveness of the remediation shall be adhered to.

Reason: To ensure that the proposed development does not cause pollution of Controlled Waters and that development complies with approved details in the interests of protection of Controlled Waters.

10. The areas allocated for vehicle parking, loading and unloading, circulation and manoeuvring on the approved plans shall only be used for the said purpose and not for any other purposes.

Reason: To ensure the provision and availability of satisfactory off-street parking and loading/unloading facilities for the development.

11. Foul drainage shall be treated as described in the drainage strategy and sewerage assessment which is submitted as part of application 12/01532/F, unless otherwise agreed in writing by the Local Planning Authority.

Reason: To prevent pollution to the water environment.

12. The Travel Plan approved under reference 13/02960/COND shall be adhered to throughout the lifetime of the development unless otherwise agreed in writing by the LPA.

Reason: In order to deliver sustainable transport objectives including a reduction in single occupancy car journeys and the increased use of public transport, walking and cycling.

13. HGV trips

The Facility shall operate in accordance with the Planning Statement, which states that the numbers of HGV movements would not exceed 29 HGV loads per day.

Reason: In order to safeguard the scheme's impact on the safe operation of the highway, and to limit the scheme's impact on air quality.

## List of approved plans

14. List of approved plans and drawings

The development shall conform in all aspects with the plans and details shown in the application as listed below, unless variations are agreed by the Local Planning Authority in order to discharge other conditions attached to this decision.

Location plan, received 7 September 2020 Site context plan, received 7 September 2020 Planning Statement, received 7 September 2020

Reason: For the avoidance of doubt.

## **Advices**

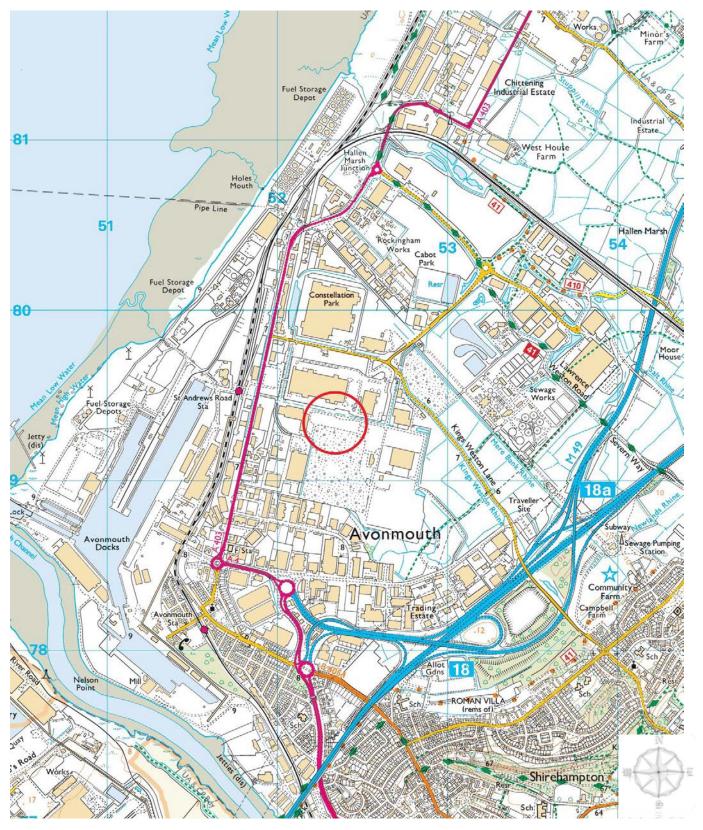
1 Wessex Water requirements: It will be necessary to comply with Wessex Water's main drainage requirements and advice and further information can be obtained from http://www.wessexwater.co.uk.

commdelgranted V1.0211

# **Supporting Documents**

#### 2. **Green Court, Access 18**

- 1.
- Site plan Elevations 2.
- 3. Planning Statement



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DRAWN BY: KD

DRAWING NO.: GPP/ZR/AB/20/01

SCALE: 1:25,000 @ A4

CHECKED BY: MD REV NO.: 01

DATE: 17/02/2020

Avonmouth Energy Facility, Zinc Road, Avonmouth, Bristol ZEUS RENEWABLES

# SITE CONTEXT PLAN

Grid Reference X 352410 Y 179361 Postcode (nearest) BS11 9FF





#### 3 ASSESSMENT OF THE DEVELOPMENT

## 3.1 Introduction

- 3.1.1 The starting point for the assessment of this proposal is the Development Plan together with supporting national planning guidance in the form of the NPPF and Planning Practice Guidance. From an assessment of these documents set out in Chapter 2 above, it is considered that the main planning issues in the determination of this proposal are:
  - Need for the proposed changes,
  - · Traffic impact, and
  - · Air Quality and emissions.
- 3.1.2 These issues are assessed in turn below.

#### Need for the Development

- 3.1.3 The 'principle' of the waste management facility in this location has already been established. This planning application relates only to increased throughput, a change in fuel type and supply chain. There are no proposed changes to the level of associated HGV movements.
- 3.1.4 The original proposal was to utilise a pre-prepared feedstock derived from non-hazardous waste and principally from the adjacent MBT facility. As a result of commercial and operational difficulties it is no longer feasible for the feedstock to be attained from the MBT plant.
- 3.1.5 It is now proposed to fuel the plant with RDF, which was the original proposed feedstock. In view of the 25-year operational life of the facility, it is appropriate to consider continuity of fuel supply from a wider catchment area. The principle of a catchment area has already been permitted for wood waste and can equally be applied to RDF without impact (17/05746/F).
- 3.1.6 The permitted facility has an accepted tonnage throughput of 120,000 tonnes per annum. The calorific value of RDF can vary and that impacts on the resultant tonnage throughput. A tonnage throughput of 120,000 tonnes per annum relies upon feedstock of a consistent high calorific value. The ability to import an extra c.30,000 tonnes per annum would ensure that the plant has inbuilt flexibility to operate at its required output using RDF, which is more variable in terms of its CV.
- 3.1.7 The increase in tonnage has the potential to provide additional recovery capacity, as provided for in the Joint Waste Core Strategy.

#### Traffic

- 3.1.8 The existing permitted tonnage throughput is 120,000 tonnes per annum which equates to 29 lorry loads per day.
- 3.1.9 The proposed change back to RDF will not result in any changes to the permitted levels of traffic. The levels of HGV movements have been considered in the original application and subsequent changes, including the addition of a 50-mile catchment area.
- 3.1.10 The RDF would be imported in baled form and as a consequence it is much denser in form and can be loaded in much more efficient manner than wood or other loose waste material. The Applicant is content to work within the existing permitted HGV movements.
- 3.1.11 The site is located within the industrial area of Avonmouth, approximately 9km north west of Bristol city centre. The site is readily accessible to the strategic highway network and the M49 and M5 motorways are located approximately 1km east of the site. The site is bordered by Zinc Road to the north, Boundary Road to the east. An access off Zinc Road leads to the site.

#### Air Quality

- 3.1.12 In order to demonstrate that the proposal to revert to RDF as a feedstock does not impact on the permitted stack or associated emissions, a D1 Chimney Height Calculation has been carried out by specialist air quality consultants, Environmental Visage. The Report is attached as Appendix 1.
- 3.1.13 The Report confirms that Zeus Renewables intends to re-develop the facility using technology supplied by Harris Pye Ltd., including the erection of a replacement chimney. Environmental Visage have assessed whether any changes are required to the height of the chimney to reflect discharge conditions associated with the Harris Pye technology.
- 3.1.14 The EfW facility currently has a 31.13m high stack which incorporates two flues associated with two processing lines.
- 3.1.15 The original facility was designed to meet emission standards in the Industrial Emissions Directive (IED), as applied to waste incineration plant. The European IPPC Bureau recently issued a revision to the Best Available Techniques Reference (BREF) Note for waste incineration processes that recommends lower achievable emission limit values. The EfW facility to be developed by Zeus will be designed to comply with the more stringent limits. As a consequence, the D1 Chimney Height Calculation uses the more stringent, lower levels.

- 3.1.16 The Chimney Height Calculation was carried out in accordance with Her Majesty's Inspectorate of Pollution, Technical Guidance Note (Dispersion) D1, "Guidelines on Discharge Stack Heights for Polluting Emissions", HMSO, (1993).
- 3.1.17 Building dimensions and distances from the chimney were taken from the approved drawings and elevations referred to in the latest planning permissions.
- 3.1.18 The full results are set out in the D1 Chimney Height Calculation. The results show that the height of the chimney associated with the facility should be at least 10.7 metres above the roof of the main building housing the plant, with an overall stack height of 25.7 metres. It was also necessary to consider the potential impact of adjacent structures, in this case the Air Cooled Condensers were factored in which gave rise to a chimney height of 27.6 metres.
- 3.1.19 While a stack height of 27.6 metres would be appropriate, the Applicant intends to replace the existing stack with one similar to the approved height. This will result in enhanced dispersion of pollutant emissions.

#### 4 CONCLUSIONS

#### 4.1 Conclusions

- 4.1.1 For robust commercial reasons, Zeus Renewables are applying for full planning permission to increase the tonnage throughput and to change the type and source of feedstock for their Low Carbon Energy Facility at Avonmouth.
- 4.1.2 This application seeks planning permission to increase the throughput to a maximum of 156,343 tonnes per annum, change the feedstock to RDF and, although the likely source is within the industrial estate, permission to source the fuel from within a 50- mile radius of the site.
- 4.1.3 Planning permission was granted for changes to the building (reference 17/01007/X). During the course of that application, it became clear that a change of feedstock may be necessary and permission was granted for the plant to operate using wood waste. Zeus Renewables have re-appraised the commercial aspects of the development and consider an RDF fed plant more viable.
- 4.1.4 The two key issues that arise out of increasing and changing feedstock are the potential for traffic impacts and any resultant air quality impacts that would give rise to an increased stack height.
- 4.1.5 The proposal to increase the tonnage throughput will not give rise to additional HGV movements as the RDF will be imported in a dense, baled form. The Applicant is content to work within the existing HGV limits.
- 4.1.6 A D1 Chimney Height Calculation has been undertaken to ascertain whether the processing of RDF would give rise to the need for an increased stack height. This has been undertaken on the basis on the more stringent emission limits set out in the recent BREF Note for waste incineration processes.
- 4.1.7 It is concluded that a lower stack would achieve the appropriate level of dispersion, however the Applicant intends to redevelop the facility based on the approved stack height which will improve the level of dispersion.
- 4.1.8 In conclusion, the proposed increases in tonnages and changes to the feedstock and supply chain are considered to be fully compliant with the relevant national and local planning policies. In light of the above, it is concluded that there are no known reasons why this planning application should not be considered favourably by the Local Planning Authority.